



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,706	04/13/2004	Tomotoshi Senoh	086142-0629	2928
22428	7590	03/17/2008		EXAMINER
FOLEY AND LARDNER LLP				KAYES, SEAN PHILLIP
SUITE 500				
3000 K STREET NW			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20007			2833	
			MAIL DATE	DELIVERY MODE
			03/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/822,706

Filing Date: April 13, 2004

Appellant(s): SENOH ET AL.

---

Howard N. Shipley  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/22/2008 appealing from the Office action  
mailed 5/25/2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The status of the claims is correct

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US-6323444 11-2001 Aoki, Hiroshi

Deleted: 1

US-6448512 09-2002 Cooper, Stephen US-6069325 05-2000 Aoki, Hiroshi

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

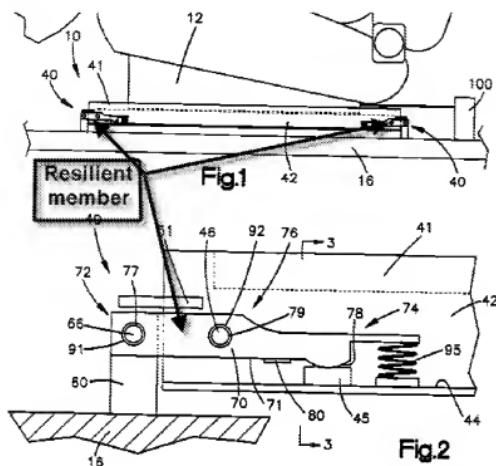
***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-8, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper (US 6448512.)
3. With respect to claim 1 Cooper teaches a device for measuring a weight of a seat, including a weight of an occupant sitting on the seat, the device comprising:
  - a resilient member (70 figure 2) supported by at least



- one support point (66, 77, and 91 figure 2);

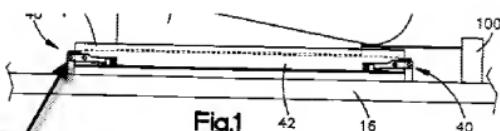


Fig.1

Support Point

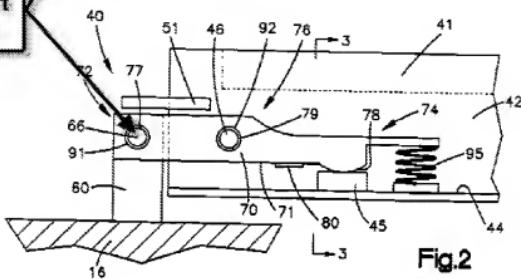
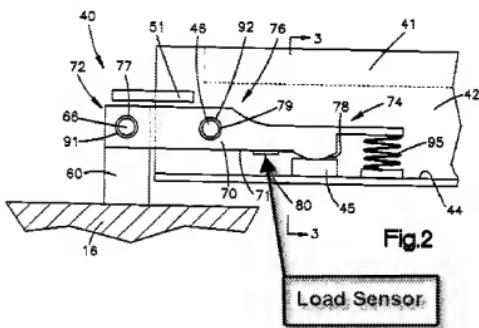
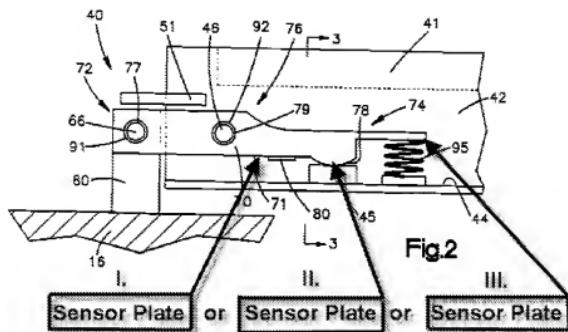


Fig.2

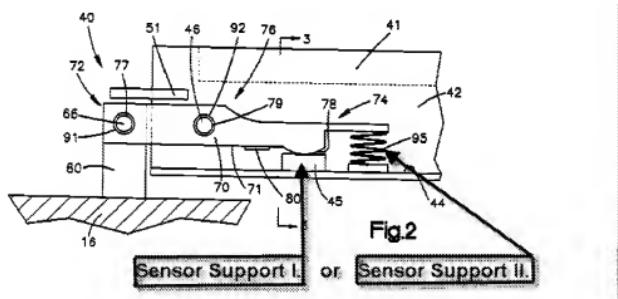
- a load sensor (80 figure 2) supported by



- a sensor plate (71 and/or 78 figure 2) and



- a sensor support (45 figure 2) and



- in communication with the resilient member (70 figure 2) and positioned to receive the weight of the seat, wherein the sensor support (45 figure 2) is formed

on an underside of the sensor plate (censor support I is formed on the underside of Sensor plate I. and/or Sensor Plate II. as depicted in the figures above. Sensor support II. is formed on the underside of sensor plate III. as depicted in the figures above.);

- wherein the device is configured so that the weight of the seat is applied (the weight of the seat is applied to pin 46 figure 2 by means of seat frame 42; column 2 lines 31-43) between the at least one support point (66, 77, and 91 figure 2) and the sensor support (45 figure 2.)

4. With respect to claim 2 Cooper teaches the device of claim 1, wherein the resilient member (70 figure 2) is a single acting part.

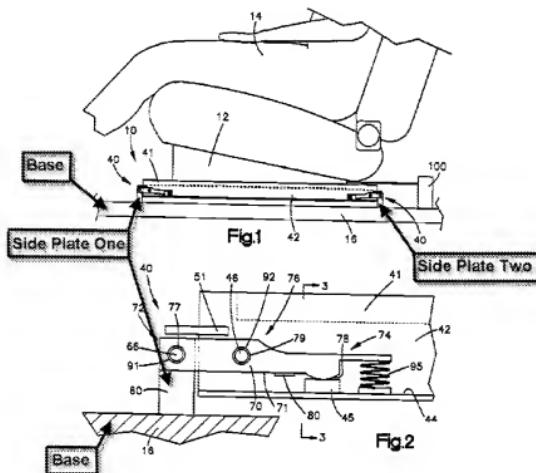
5. With respect to claim 4 Cooper teaches the device of claim 1, further comprising a pin bracket (46 figure 2) adapted to be in communication with the seat and the resilient member.

6. With respect to claim 5 Cooper teaches the device of claim 4, wherein the pin bracket (92 figure 2) is rotatably supported by a base pin (66 figure 2.)

7. With respect to claim 6 Cooper teaches the device of claim 5, wherein the pin bracket (92 figure 2) transmits the seat weight to a bracket pin (46 figure 2.)

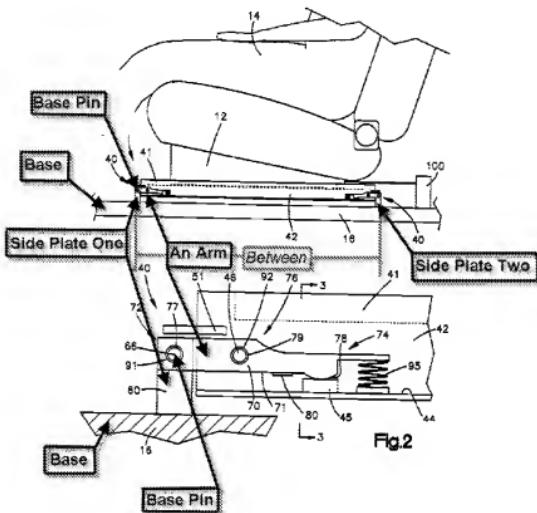
8. With respect to claim 7 Cooper teaches a device for measuring seat weight including a weight of an occupant sitting on a seat (12 and 41 figure 2), the device comprising:

- base (16 figure 2) having two side plates (Figure 1 shows wherein there are two of element 60 figure 2.);



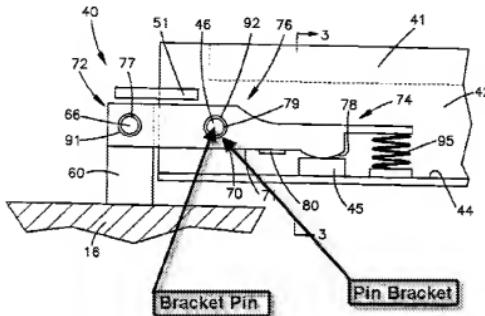
- an arm (70 figure 2) rotatably supported (column 2 lines 47-50; the arm 70 figure 2 rotates about a pivot in side plate one {figures above and below}. Said rotation

changes the rotational orientation of the arm relative to both side plates, one and two (figures above and below) by and interdisposed ("between" figure provided below) between the side plates of the base via a base pin (66 figure 2);

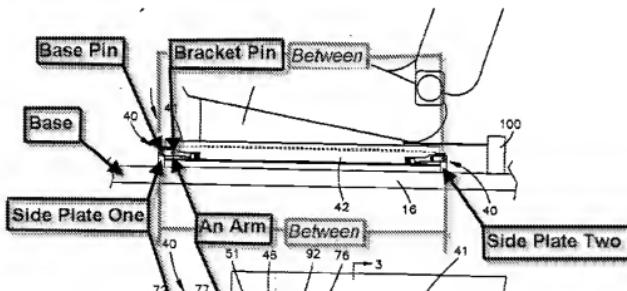


- a pin bracket (bushing/bracket 92 figure 2; 42 in combination with bushing 92) figure 2 holds the pin 46 such that arm {70 figure 2} rotates relative to the seat {41 and 12 figure 2} ) in communication with the arm (70 figure 2) via a bracket

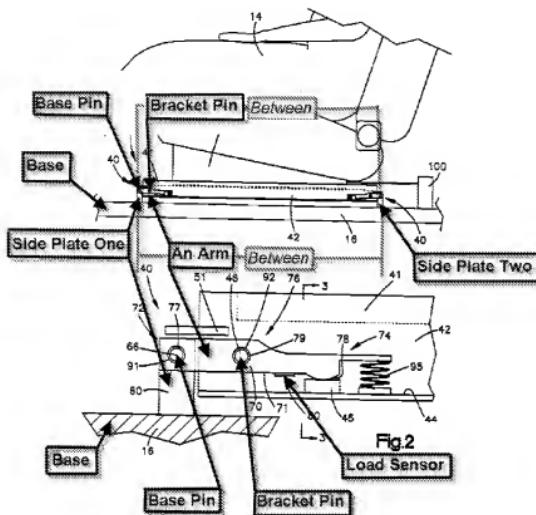
pin (46 figure 2) and further adapted to be in communication with the seat (12 and 41 figure 2),



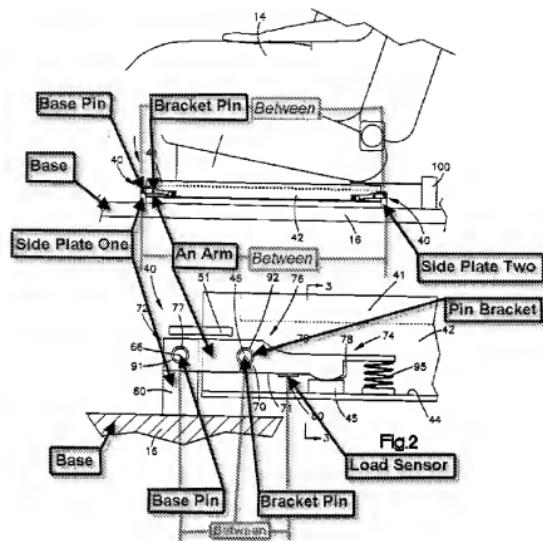
- wherein the bracket pin (46 figure 2) is partially located between the two side plates (60 figure 2; figure 1; and "between" figure is provided below) of the base (16 figure 2); and



- a load sensor (80 figure 2) in communication with the arm; and



- wherein the pin bracket (bushing/bracket 92 figure 2; Element 92 is entirely located between the load sensor and the base pin.) is located between the base pin (66 figure 2) and the load sensor (80 figure 2.)



9. With respect to claim 8 Cooper teaches the device of claim 7, wherein the resilient member (70 figure 2) is a single acting part.

10. With respect to claim 10 Cooper teaches the device of claim 7, wherein the pin bracket (92 figure 2) is rotatably supported by a base pin (66 figure 2.)

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Aoki (US 6069325.)

13. With respect to claim 12 Cooper teaches the device according to claim 7. Cooper does not explicitly state wherein the arm (70) comprises two arm side plates. Aoki teaches using side plates because of the simple manufacturing process involved therewith. Column 1 lines 65-67 state reduction in size and machining and assembly costs. Aoki additionally teaches a design capable of reduced thickness and thus reduced mass (column 1 lines 14-17.)

At the time of the invention it would have been obvious to one skilled in the art to provide Cooper's arm (70) with sideplates as taught by Aoki. The suggestion or motivation for doing so would be to reduce the weight of the part and/or provide an easy machine process for its production as taught by Aoki.

14. With respect to claim 13 Cooper discloses the device of claim 12 further comprising a spring (95 figure 2) interdisposed between the two arm side plates. Cooper does not disclose wherein the spring is a spring leaf.

Aoki teaches a weight transmission method wherein a weight transmitting bracket is biased toward a center position by a leaf spring.

At the time of the invention it would have been obvious to one skilled in the art to provide a leaf spring for biasing the weight transmitting bracket toward a center position as taught by Aoki. The suggestion or motivation would be to bias the bracket to a center position as taught by Aoki.

15. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Aoki (US 6323444.)

16. With respect to claims 3 and 9 Cooper teaches the device of claims 1 and 7 respectively.

Cooper does not teach wherein the resilient member has two acting parts.

Aoki teach using two acting parts on a common resilient member.

At the time of the invention it would have been obvious to one skilled in the art to modify Cooper's element 78 to have two acting elements instead of one as taught by Aoki. The suggestion or motivation for doing so would be to provide lateral support, thus reducing torsional movement of the arm while maintaining desired traits.

#### **(10) Response to Argument**

17. Appellant states:

This rejection is improper for at least the following reasons. First, claim 7 requires that the arm be rotatably supported by the two side plates of the base. Cooper does not teach or suggest this

feature because the lever 70 of Cooper is not supported by both mounts 60 by a pin but is merely supported by one mount via the pin 66. Accordingly, the lever 70 of Cooper cannot be considered the arm of claim 7 because the lever 70 is not rotatably supported by two side plates of the base via a base pin. No other element of Cooper can be interpreted to be the arm of claim 7. Thus, Cooper does not teach or suggest the arm of claim 7, and the rejection should be withdrawn because Cooper does not teach or suggest all the features of claim 7.

This argument is not persuasive. Each of the rotational arms (70 figure 2) of Cooper is supported by both side plates (60 figure 2.) The left arm of figures 1-2 is supported by the left side plate by a pin (66 figure 2.) The left arm of figures 1-2 is supported by the right side plate by connection through intermediate element 44 figure 2. If for instance the right side plate of the device were to be removed the device would no longer operate. Plate 44 figure 2 would drop until it came to rest against 16 figures 1-2. Under such a circumstance element 70 could no longer be understood to be rotationally supported by either side plate as normal operation of the device (namely application of weight to the seat portion) would not cause the arm to rotate or be capable of rotation about either side plate. Instead of experiencing a rotational movement the weight of the seat would be translated to the plate 44 figure 2 and thus to base plate 16 figure 2. The weight of the seat would thus at least in part not be translated to the side plates and would not induce rotation of the arms as per the normal operation of the device. It is under this interpretation that the two side plates are understood to "rotatably support" "an arm" of the device as set forth in claim 7.

18. Appellant states:

Second, claim 7 requires a pin bracket to be in communication with the arm via a bracket pin. Cooper does not teach or suggest this features. The bushing 92 of Cooper has been interpreted

as the pin bracket of claim 7. (Paragraph 8 of the Final Office Action.) Such an interpretation is unreasonable, contrary to MPEP 2111 (see above). A bushing is known by one with ordinary skill in the art to be a removable cylindrical lining for an opening (as of a mechanical part) used to limit the size of the opening, resist abrasion, or serve as a guide. The bushing 92 of Cooper is consistent with this meaning as the bushing 92 engages the lever 70 and the second support pin 46 of the vehicle seat frame 42 for facilitating the relative rotation between the lever 70 and the seat frame 42 (i.e., resists abrasion for the rotation). (Column 2, lines 50-53 of Cooper.) In contrast, a pin bracket would be known in the art to mean a member or fixture that projects from a structure and is designed to support a load. In this case, the bushing 92 of Cooper simply does not project from a feature and support a load, but merely facilitates relative rotation between the lever 70 and the seat frame 40. Thus, the bushing 92 is not considered by one with ordinary skill in the art to be a pin bracket, and such an interpretation is unreasonable.

This argumentation is not persuasive. Appellant's definition of bushing is limiting. A bracket does no more than hold the pin in communication with the arm. Therefor the bushing and bracket are synonymous. Elements 92 (bushing) and 42 (seat frame) act to apply the weight of the seat to the arm by means of the pin. Thus said elements are consistent with the claim limitation of a "pin bracket" as set forth in claim 7.

Appellant asserts that the bushing 92 of Cooper is not consistent with the terminology pin bracket. In support of this position appellant sets forth definitions for "bushing" and "pin bracket." Appellant additionally sets forth a conclusion statement that one of ordinary skill in the art would agree with definitions set forth. Appellant does not set forth evidence in support of either the definitions set forth or the nature of one of ordinary skill in the art. Thus appellant's assertions do not constitute a sound argument. The bushing

92 figure 2 is consistent with the terminology pin bracket. Moreover, element 42 is consistent with the claim limitations as further defined by appellant's arguments.

19. Appellant states:

Furthermore, the bushing 92 of Cooper cannot be interpreted to be the pin bracket because claim 7 requires the pin bracket to be "in communication with the arm via a bracket pin." It is asserted in the Final Office Action that the bushing 92 of Cooper is interpreted to be the pin bracket, the lever 70 of Cooper is interpreted to be the arm, and the support pin 46 of Cooper is interpreted to be the bracket pin. However, the bushing 92 of Cooper is not in communication with the lever 70 via the support pin 46, but the bushing 92 is in direct communication with the lever 70 of Cooper. (See Fig. 2 of Cooper.) Because the bushing 92 is not in communication with the lever 70 via the support pin 46, the bushing 92 cannot be interpreted to be the pin bracket of claim 7.

This argumentation is not persuasive. Appellant is arguing limitations that are not present in the claims.

Claim 7 recites in part:

a pin bracket in communication with the arm via a bracket pin and further adapted to be in communication with the seat, wherein the bracket pin is partially located between the two side plates of the base

The bushing/bracket 92 operates in conjunction with the seat frame 42 so as to apply the weight of the seat to the arm 70 by way of the pin 48. The bushing is in communication with the arm via a bracket pin in so much as the bushing allows the pin to rotate with respect to the arm. If the pin were to be removed the bushing would not be in rotational communication with the arm, because there would be no way to induce rotation. However, even if one disagrees with this analysis of the claims, element 42 figure 2 (the seat frame) is still consistent with the limitations associated with the "pin

bracket" as claimed in claim 7 and as interpreted by appellant in the arguments cited above. Element 42 is entirely located between the two side plates of the base as per the cited claim limitation. Element 42 is further located between the base pin and the load sensor as per the last line of claim 7.

20. Appellant states:

No other element of Cooper can be interpreted to be the pin bracket of claim 7. For example, the lever 70 of Cooper cannot be interpreted as the pin bracket because it is already interpreted to be the arm of claim 7, and it is improper to interpret the lever 70 as the arm and the pin bracket when these elements are different and distinct. Because Cooper does not teach or suggest the pin bracket of claim 7, Cooper does not teach or suggest all the features of claim 7, and the rejection should be withdrawn.

This assertion is not persuasive. There is no need to interpret any other element as the pin bracket. The bushing/bracket 92 is consistent with the claim limitations. However, element 42 figure 2 is consistent with even appellant's narrow interpretation of the claim limitation "pin bracket". Both interpretations render the claim anticipated by Cooper in accordance with 35 USC 102 as set forth in the grounds of rejection.

MPEP section 904.01 states:

Analysis of Claims

The breadth of the claims in the application should always be carefully noted; that is, the examiner should be fully aware of what the claims do not call for, as well as what they do require. During patent examination, the claims are given the broadest reasonable interpretation consistent with the specification. See *In re Morris*, 127 F.3d 1048, 44USPQ2d 1023 (Fed. Cir. 1997).

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." >The Federal Circuit's en

banc decision in Phillips v. AWH Corp., 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) expressly recognized that the USPTO employs the "broadest reasonable interpretation" standard:

The Patent and Trademark Office ("PTO") determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted by one of ordinary skill in the art." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364[, 70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75(d)(1).

415 F.3d at 1316, 75 USPQ2d at 1329. See also<sup><</sup> In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969) (Claim 9 was directed to a process of analyzing data generated by mass spectrographic analysis of a gas. The process comprised selecting the data to be analyzed by subjecting the data to a mathematical manipulation. The examiner made

rejections under 35 U.S.C. 101 and 102. In the 35 U.S.C. 102 rejection, the examiner explained that the claim was anticipated by a mental process augmented by pencil and paper markings. The court agreed that the claim was not limited to using a machine to carry out the process since the claim did not explicitly set forth the machine. The court explained that "reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim,' to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim." The court found that applicant was advocating the latter, i.e., the impermissible importation of subject matter from the specification into the claim.).

In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit. Rather, the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification.").

21. Appellant states:

The rejection of claim 9 should be withdrawn because any combination of Cooper and Aoki '444 fails to disclose, teach, or suggest all the features of claim 7 and its dependent claim 9. Claim 9 depends from and contains all the features of claim 7. Cooper does not teach or suggest an arm rotatably supported by the side plates of the base via a base pin or a pin bracket in communication with the arm via a bracket pin. Aoki '444 does not cure these deficiencies. Thus, any combination of Cooper and Aoki '444 does not teach or suggest all the features of claim 7 and its dependent claim 9, and the rejection should be withdrawn. Reconsideration and withdrawal of the rejection of claim 9 are respectfully requested.

This argument is not persuasive. As stated above, each of the rotational arms (70 figure 2) of Cooper is supported by both side plates (60 figure 2.) The left arm of figures 1-2 is supported by the left side plate by a pin (66 figure 2.) The left arm of figures 1-2 is supported by the right side plate by connection through intermediate element 44 figure 2. If for instance the right side plate of the device were to be removed the device would no longer operate. Plate 44 figure 2 would drop until it came to rest against 16 figures 1-2. Under such a circumstance element 70 could no longer be understood to be rotationally supported by either side plate as normal operation of the device (namely application of weight to the seat portion) would not cause the arm to rotate or be capable of rotation about either side plate. Instead of experiencing a rotational movement the weight of the seat would be translated to the plate 44 figure 2 and thus to base plate 16 figure 2. The weight of the seat would thus at least in part not be translated to the side plates and would not induce rotation of the arms as per the normal operation of the device. It is under this interpretation that the two side plates are understood to "rotatably support" "an arm" of the device as set forth in claim 7.

22. Appellant states:

The rejection of claim 12 should be withdrawn because any combination of Cooper and Aoki '325 fails to disclose, teach, or suggest all the features of claim 7 and its dependent claim 12. Claim 12 depends from and contains all the features of claim 7. Cooper does not teach or suggest an arm rotatably supported by the side plates of the base via a base pin or a pin bracket in communication with the arm via a bracket pin. Aoki '325 does not cure these deficiencies. Thus, any combination of Cooper and Aoki '325 does not teach or suggest all the features of claim 7 and its dependent claim 12, and the rejection should be withdrawn.

This argument is not persuasive. As stated above each of the rotational arms (70 figure 2) of Cooper is supported by both side plates (60 figure 2.) The left arm of figures 1-2 is supported by the left side plate by a pin (66 figure 2.) The left arm of figures 1-2 is supported by the right side plate by connection through intermediate element 44 figure 2. If for instance the right side plate of the device were to be removed the device would no longer operate. Plate 44 figure 2 would drop until it came to rest against 16 figures 1-2. Under such a circumstance element 70 could no longer be understood to be rotationally supported by either side plate as normal operation of the device (namely application of weight to the seat portion) would not cause the arm to rotate or be capable of rotation about either side plate. Instead of experiencing a rotational movement the weight of the seat would be translated to the plate 44 figure 2 and thus to base plate 16 figure 2. The weight of the seat would thus at least in part not be translated to the side plates and would not induce rotation of the arms as per the normal

operation of the device. It is under this interpretation that the two side plates are understood to "rotatably support" "an arm" of the device as set forth in claim 7.

23. Appellant states:

Additionally, any rejection based on the combination of Cooper and Aoki '325 is improper because there is no reason to combine the teachings of Cooper and Aoki '325. The Final Office Action asserts that Cooper does not teach an arm with side plates, Aoki '325 teaches such side plates, and it would have been obvious to provide the lever 70 of Cooper with the side plates of Aoki for the reduction of weight of the part and/or to provide an easy machine process for its production as taught by Aoki. (Paragraph 13 of the Final Office Action.) Adding the side walls of Aoki to the lever 30 of Cooper would include an additional manufacturing step of adding the side walls to the lever (making manufacturing harder) and increase the material of the lever 30 by the addition of the side walls (increasing the weight of the device). The proposed modification would then negate the alleged reason for adding the side walls, i.e., for easier manufacture and reduction of weight. Thus, one with ordinary skill in the art would not have a reason to add the side walls of Aoki because it would increase manufacturing costs and the weight of the device. In addition, the addition of sidewalls does not, in and of itself, provide a particular benefit to the device of Cooper. As the lever 70 of Cooper does not require the side walls to function, and the additional sidewalls does not provide a particular functional benefit. Because there is no reason to add the side walls to the lever 70 of Cooper, the proposed modification, and hence the rejection based on the modification, is improper, and should be withdrawn.

This argument is not persuasive. The motivation for combination is provided by the Aoki reference. Column 1 lines 65-67 state reduction in size and machining and assembly

costs. Column 1 lines 14-17 states that the teaching of Aoki is utilized to achieve a reduction in size/thickness over the prior art, and thus a reduction in weight.

Appellant's assertions with regard to the process of manufacturing and the nature of the weight of the device are considered in the absence of the knowledge that one of ordinary skill in the art would possess. One of ordinary skill in the art would recognize that the use of side plates would allow for a reduction of mass of the center core while maintaining the same structural strength. One of ordinary skill in the art would recognize that the use of side plates would achieve a reduction in machining and assembly costs (as taught by Aoki column 1 lines 66-67) because the step of attaching side plates to a core would be an easier/less costly step than milling/machining a larger solid core of similar structural strength. Additionally the cost of material is part of an assembly cost and thus a hollow side plate structure would consume less material than its solid core equivalent.

Appellant's assertions with regard to how a manufacturing process according to claim 12 could be made more difficult does not negate the teachings of Aoki. One of ordinary skill in the art would have been motivated by the teachings of Aoki, column 1 lines 66-67.

24. Appellant States:

When interpreting any term in the claim, that interpretation should be reasonable. The MPEP states that "[d]uring patent examination, the pending claims must be 'given their broadest reasonable interpretation consistent with the specification.'" (MPEP 2111.) Also, "[t]he broadest

reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach." In this case, the interpretation of the resilient member and the sensor plate is not reasonable because the lever 70 of Cooper has been interpreted to be two different and distinct claim elements: the resilient member and the sensor plate. It is improper to use the same lever 70 in Cooper to satisfy two different elements. Thus, a rejection based on this interpretation is improper. When properly interpreted, Cooper does not teach or suggest a resilient member and a sensor plate even if the lever 70 of Cooper is interpreted to be either the resilient member or the sensor plate. If the lever 70 of Cooper is interpreted to be the resilient member, the sensor 80 of Cooper is located on the lever 70, which means there is no sensor plate supporting the sensor 80. (Column 3, lines 41-45 of Cooper.) If the lever 70 of Cooper is interpreted to be the sensor plate 80, there is no other element supported by a support point that can be considered to be the resilient member. Thus, Cooper does not teach or suggest a resilient member and a sensor plate.

This argument is not persuasive. Appellant is narrowly interpreting the claims to entail limitations that they do not contain. There is no language in the claims that precludes the sensor plate from being integral with the resilient member. To the contrary there is language requiring the sensor plate to be "in communication with the resilient member."

The claim language does not recite or refer to acceptable or unacceptable forms of "communication." As depicted in figure 2, element 70 has numerous parts of different purpose and design. For instance the end plate engaging with the spring 95 is very distinct from the main portion holding pins 46 and 66. While these elements may be integrally formed they do constitute discrete elements. As per the grounds of rejection above the sensor plate can be understood to be a number of discrete portions of the arm. As depicted in figure 2 and in the figure provided in the grounds of rejection above,

the sensor plate can firstly be understood to correspond to the structure of 70 which touches the load sensor (80 figure 2.) Under this interpretation the resilient member corresponds to the main portion housing pins 66 and 46 figure 2. This portion is understood to be the resilient member as it is thicker than the portion touching the sensor (80 figure 2.) According to the second interpretation the sensor plate could correspond to element 78 of the arm. This arm supports the sensor in that it supports the arm and allows the sensor to remain removed from the base 44 as depicted in figure 2. The support nature of element 78 as well as how element 78 forms a discrete element relative to the main arm can additionally be seen in figure 3. According to the third interpretation the sensor plate is the end plate (plate III. according to the figure provided in the grounds of rejection above; element 74 most directly indicates the plate In figure 2) that engages with spring element 95 figure 2. Under this interpretation the plate is understood to support the sensor 80 figure 2 in a similar fashion to element 78. The end plate/sensor plate supports the entire arm including the sensor be transmitting the spring force thereto. The end plate additionally provides a portion of the bending force which is directly applied to the load sensor (80 figure 2.) All three interpretations are consistent with the broadest reasonable interpretation as set forth by the precedents cited above.

25. Appellant states:

The rejection of claims 2 and 4 should be withdrawn because Cooper fails to disclose, teach, or suggest all the features of claim 1 and its dependent claims 2 and 4. Dependent claims 2 and 4

depend from claim 1, and are allowable therewith for at least the reasons set forth above without regard to the further patentable limitations contained therein. Reconsideration and withdrawal of the rejection of claims 2 and 4 are respectfully requested.

This argument is not persuasive. As stated above Cooper does teach all of the features of claim 1. Each of the rotational arms (70 figure 2) of Cooper is supported by both side plates (60 figure 2.) The left arm of figures 1-2 is supported by the left side plate by a pin (66 figure 2.) The left arm of figures 1-2 is supported by the right side plate by connection through intermediate element 44 figure 2. If for instance the right side plate of the device were to be removed the device would no longer operate. Plate 44 figure 2 would drop until it came to rest against 16 figures 1-2. Under such a circumstance element 70 could no longer be understood to be rotationally supported by either side plate as normal operation of the device (namely application of weight to the seat portion) would not cause the arm to rotate or be capable of rotation about either side plate. Instead of experiencing a rotational movement the weight of the seat would be translated to the plate 44 figure 2 and thus to base plate 16 figure 2. The weight of the seat would thus at least in part not be translated to the side plates and would not induce rotation of the arms as per the normal operation of the device. It is under this interpretation that the two side plates are understood to "rotatably support" "an arm" of the device as set forth in claim 7.

26. Appellant states:

The rejection of claims 5-6 should be withdrawn because Cooper fails to disclose, teach, or suggest all the features of claims 5-6. Claims 5-6 require a pin bracket rotatably supported by a base pin along with the other features of claim 1 from which they depend. In the Final Office Action, it is asserted that the bushing 92 of Cooper is interpreted to be the pin bracket. (Paragraphs 6-7 of the Final Office Action.) This rejection is improper because such an interpretation is unreasonable, contrary to MPEP 2111 (see above).

This argument is not persuasive. As stated above appellant's definition of bushing is limiting. A bracket does no more than hold the pin in communication with the arm. Therefor the bushing and bracket are synonymous. Elements 92 (bushing) and 42 (seat frame) act to apply the weight of the seat to the arm by means of the pin. Thus said elements are consistent with the claim limitation of a "pin bracket" as set forth in claim 7. Appellant asserts that the bushing 92 of Cooper is not consistent with the terminology pin bracket. In support of this position appellant sets forth definitions for "bushing" and "pin bracket." Appellant additionally sets forth a conclusion statement that one of ordinary skill in the art would agree with definitions set forth. Appellant does not set forth evidence in support of either the definitions set forth or the nature of one of ordinary skill in the art. Thus appellant's assertions do not constitute a sound argument. The bushing 92 figure 2 is consistent with the terminology pin bracket. Moreover, element 42 is consistent with the claim limitations as further defined by appellant's arguments.

27. Appellant continues to repeat the arguments previously addressed:

A bushing is known by one with ordinary skill in the art to be a removable cylindrical lining for an opening (as of a mechanical part) used to limit the size of the opening, resist abrasion, or serve

as a guide. The bushing 92 of Cooper is consistent with this meaning as the bushing 92 engages the lever 70 and the second support pin 46 of the vehicle seat frame 42 for facilitating the relative rotation between the lever 70 and the seat frame 42 (i.e., resists abrasion for the rotation).

(Column 2, lines 50-53 of Cooper.) In contrast, a pin bracket would be known in the art to mean a member or fixture that projects from a structure and is designed to support a load. In this case, the bushing 92 of Cooper simply does not project from a feature and support a load, but merely facilitates relative rotation between the lever 70 and the seat frame 40. Thus, the bushing 92 is not considered by one with ordinary skill in the art to be a pin bracket, and such an interpretation is unreasonable. No other element of Cooper can be interpreted to be the pin bracket of claims 5-6. For example, the lever 70 of Cooper cannot be interpreted as the pin bracket because it is already interpreted to be the resilient member and the sensor plate of claims 5-6, and it is improper to interpret the lever 70 as the resilient member, the sensor plate, and the pin bracket when these elements are different and distinct. Because Cooper does not teach or suggest the pin bracket of claims 5-6, Cooper does not teach or suggest all the features of claims 5-6, and the rejection should be withdrawn. For at least these reasons, claims 5-6 is not anticipated by Cooper, and the rejection should be withdrawn.

This argument is not persuasive. As stated above, appellant's definition of bushing is limiting. A bracket does no more than hold the pin in communication with the arm. Therefor the bushing and bracket are synonymous. Elements 92 (bushing) and 42 (seat frame) act to apply the weight of the seat to the arm by means of the pin. Thus said elements are consistent with the claim limitation of a "pin bracket" as set forth in claim 7. Appellant asserts that the bushing 92 of Cooper is not consistent with the terminology pin bracket. In support of this position appellant sets forth definitions for "bushing" and "pin bracket." Appellant additionally sets forth a conclusion statement that one of ordinary skill in the art would agree with definitions set forth. Appellant does not set forth

evidence in support of either the definitions set forth or the nature of one of ordinary skill in the art. Thus appellant's assertions do not constitute a sound argument. The bushing 92 figure 2 is consistent with the terminology pin bracket. Moreover, element 42 is consistent with the claim limitations as further defined by appellant's arguments.

28. Appellant states:

The rejection of claim 3 should be withdrawn because any combination of Cooper and Aoki '444 fails to disclose, teach, or suggest all the features of claim 1 and its dependent claim 3. Claim 3 depends from and contains all the features of claim 1. Cooper does not teach a resilient member and a sensor plate that are two distinct and separate elements. Aoki '444 does not cure this deficiency. Thus, any combination of Cooper and Aoki '444 does not teach or suggest all the features of claim 1 and its dependent claim 3, and the rejection should be withdrawn.

Reconsideration and withdrawal of the rejection of claim 3 are respectfully requested.

This argument is not persuasive. As stated above, appellant is narrowly interpreting the claims to entail limitations that they do not. There is no language in the claims that precludes the sensor plate from being integral with the resilient member. To the contrary there is language requiring the sensor plate to be "in communication with the resilient member." The claim language does not recite or refer to acceptable or unacceptable forms of "communication." As depicted in figure 2, element 70 has numerous parts of different purpose and design. For instance the end plate engaging with the spring 95 is very distinct from the main portion holding pins 46 and 66. While these elements may be integrally formed they do constitute discrete elements. As per the grounds of

rejection above the sensor plate can be understood to be a number of discrete portions of the arm. As depicted in figure 2 and in the figure provided in the grounds of rejection above, the sensor plate can firstly be understood to correspond to the structure of 70 which touches the load sensor (80 figure 2.) Under this interpretation the resilient member corresponds to the main portion housing pins 66 and 46 figure 2. This portion is understood to be the resilient member as it is thicker than the portion touching the sensor (80 figure 2.) According to the second interpretation the sensor plate could correspond to element 78 of the arm. This arm supports the sensor in that it supports the arm and allows the sensor to remain removed from the base 44 as depicted in figure

2. The support nature of element 78 as well as how element 78 forms a discrete element relative to the main arm can additionally be seen in figure 3. According to the third interpretation the sensor plate is the end plate (plate III. according to the figure provided in the grounds of rejection above; element 74 most directly indicates the plate In figure 2) that engages with spring element 95 figure 2. Under this interpretation the plate is understood to support the sensor 80 figure 2 in a similar fashion to element 78. The end plate/sensor plate supports the entire arm including the sensor be transmitting the spring force thereto. The end plate additionally provides a portion of the bending force which is directly applied to the load sensor (80 figure 2.) All three interpretations are consistent with the broadest reasonable interpretation as set forth by the precedents cited above.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,  
Sean Kayes

Conferees:

/Paula A. Bradley/  
Supervisory Patent Examiner, Art Unit 2833  
/David S Blum/  
TQAS Appeal Specialist, TC 2800